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Corporate Corruption and Lies Lead to EPA Supporting Toxic Tragedy

EPA reliance on corrupt science leads to the marketing of pesticide products

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The *Midwest Center for Investigative Reporting* published a piece in early December on yet another example of the corporate malfeasance that exalts profit far above concerns for safety, health, and ecosystems. The *Midwest Center's* investigation, "Buy it or else': Inside Monsanto and BASF's moves to force dicamba on farmers," finds that Monsanto/Bayer and BASF, makers of the crop-damaging herbicide dicamba, engaged in a variety of deceitful, unethical, and possibly fraudulent practices to enable its use. The bottom line is that, according to records uncovered, the companies knew, before they released dicamba, about the massive damage it would cause—and then put it on the market anyway. Beyond Pesticides has reported on the corporate greed that fuels the downstream public health, environmental, and economic devastation these pesticides cause, and advocated for their removal from the market. This corporate malfeasance has embedded itself into the decision-making process at the U.S. Environmental Protection Agency (EPA), where the Office of Pesticide Programs relies on industry-generated safety data to register and regulate pesticide products whose uses result in widespread public exposure.

THE GENETICALLY ENGINEERED CROP-PESTICIDE DEPENDENT TREADMILL

Such unscrupulous and potentially illegal behavior is not confined to these companies; Bayer (which now owns Monsanto) and Syngenta (China National Chemical Corporation, known

as ChemChina) are also implicated in similar actions related to other pesticides: glyphosate, and atrazine, respectively. Over the course of the past couple of decades, large agrochemical corporations have pursued not only extreme market penetration for their toxic products, but also, vertical integration that, in the case of Bayer/Monsanto, "represents a near-monopoly on the agriculture supply chain," according to Green America. Corporate ownership of the patent on genetically engineered (GE) seeds—which work only when paired with pesticides the company manufactures—not only suppresses competition, but also, with enough market share, essentially imposes near-complete reliance by farmers on one company's products. Analysts and advocates regard this as a serious threat to the global food supply, health, biodiversity, and the environment.

When EPA fails to carry out its mission to protect health and the environment by allowing use of pesticides that are known to be hazardous and not fairly and scientifically evaluated, the agrochemical landscape becomes a toxic tragedy. A bit of review of the dicamba saga will be helpful. Dicamba is a particularly problematic herbicide, given its propensity to drift, the widespread damage it causes to nontarget flora, and industry's intensive marketing of various product iterations. Added to that list are its impacts on human health: carcinogenicity, neurotoxicity, hepatic and renal damage, and developmental effects, among others. Further, it is toxic to birds, fish, and other aquatic organisms, which is especially relevant where it shows up in groundwater, as it tends to in the Pacific Northwest.

DICAMBDA

Dicamba damages crops and rural communities: EPA sidelined



THE HERBICIDE WAS USED FOR DECADES ON ITS OWN

to control weeds on cropland. The “modern” dicamba debacle began in 2016 when EPA approved Monsanto’s dicamba “strategy” for cotton and soybeans: the dicamba formulation Xtendimax for use with seeds genetically engineered to be dicamba-tolerant. Once deployed, because of the herbicide’s strong tendency to drift for significant distances, its use resulted in “millions of acres of crop damage across the Midwest and South; widespread tree death in many rural communities, state parks and nature preserves; and an unprecedented level of strife in the farming world.” As reports of this extreme damage began to roll in, states began to scramble to regulate dicamba’s use, absent federal efforts, to try to curb some of the devastation.

“Holdout” farmers, including organic growers, who have rejected the use of the GE-seed-plus-herbicide scheme, have been particularly vulnerable to the ravages of dicamba drift. Their complaints to neighboring farmers, whose dicamba use has compromised yield, destroyed crops, or rendered them no longer organic, are often met with indifference or anger. (As mentioned above, dicamba use is a factor in increasing tensions in some rural communities, including a murder over crop damage.) These farmers are faced, as the *Midwest Center* writes, with the choice to “get poisoned or get on board” the (GE-seed-plus-herbicide) train.

SUING THE CHEMICAL COMPANY FOR DAMAGES

Notably, as *Beyond Pesticides* reported in early 2020, a Missouri peach farmer that sued Bayer and BASF for damage to his trees won \$265 million in compensation for the companies’ “negligence in the design of their dicamba herbicides, and failure to warn farmers about the dangers of their products. . . . The jury determined that the joint venture between the two companies amounted to a conspiracy to create an ‘ecological disaster’ in the name of profit.” An attorney for the plaintiff in that case, Billy Randles, commented, “This is the first product in American history that literally destroys the competition. . . . You buy it or else.”

These realities demonstrate the perverse elegance of strategic corporate “verticality-plus-penetration.” Pesticide manufacturers control supply chains, functionally force farmers into intense reliance on their products, and then use other farmers as leverage on those who resist to get them to “get with the program.” Monsanto has been notorious for bankrupting small farmers who have dared to say “no” to its near-hegemony by, for example, saving seeds to plant in the

following season, thus opting out of purchasing the company’s GE seeds.

This *Midwest Center* reporting shows that executives at Monsanto, knowing full-well the potential damage of their dicamba/GE seed system, proceeded. The story reveals that Monsanto:

- released and marketed its dicamba products “knowing that dicamba would cause widespread damage to soybean and cotton crops that weren’t resistant to dicamba. They used ‘protection from your neighbors’ [messaging] as a way to sell more of their products. In doing so, the companies ignored years of warnings from independent academics, specialty crop growers and their own employees.”
- limited any testing that could have delayed or denied EPA approval of dicamba; “For years, Monsanto struggled to keep dicamba from drifting in its own tests. In regulatory tests submitted to the EPA, the company sprayed the product in locations and under weather conditions that did not mirror how farmers would actually spray it. Midway through the approval process, with the EPA paying close attention, the company decided to stop its researchers from conducting tests.”
- knew of outstanding questions and concerns about dicamba’s use when it submitted data for approval to regulators; “The company’s own research showed dicamba mixed with other herbicides was more likely to cause damage. The company also prevented independent scientists from conducting their own tests and declined to pay for studies that would potentially give them more information about dicamba’s real-world impact.”
- investigated drift incidents in ways designed to “limit their liability, find other reasons for the damage, and never end with payouts to farmers.”
- collaborated for years with BASF on the dicamba-tolerant seed system.
- “released seeds resistant to dicamba in 2015 and 2016 without an accompanying weed killer, knowing that off-label spraying of dicamba, which is illegal, would be ‘rampant.’ At the same time, BASF ramped up production of older versions of dicamba that were illegal to apply to the crops and made tens of millions of dollars selling the older versions, which were more likely to move off of where they were applied.”



ROUNDUP

Monsanto pushes glyphosate/Roundup-dependent crops without EPA objection

IN 1989, MONSANTO INTRODUCED ITS ROUNDUP Ready™ scheme—GE (glyphosate-tolerant) seeds to be used with the company's existing glyphosate-based herbicide, Roundup. Glyphosate herbicides have been in heavy use in the U.S. for GE soybeans, corn, canola, alfalfa, cotton, and sorghum for more than two decades. In the mid-2000s, this profitable ploy began to hit speed bumps, as widespread resistance to glyphosate began to develop. The Bayer/Monsanto response to this resistance and the subsequent development of so-called "super weeds" was to double down, developing soybean and cotton seeds that were tolerant of both dicamba and glyphosate, and encouraging tank mixing and use of both herbicides. This tactic also became problematic: (1) this mixing increases concentrations of dicamba in the air up to nine times compared to dicamba alone, and (2) dicamba, when mixed with glyphosate, and/or when used in hot weather, is even more drift prone than the compound by itself.

CORPORATE DECEPTION ON GLYPHOSATE/ROUNDUP SAFETY

Monsanto, with its role with dicamba and glyphosate, has been "all in" on the chemical treadmill, and is a notorious corporate "bad actor." It has spent years and a fortune on efforts to convince the public that its glyphosate products are "safe," primarily by hiding information about the herbicide's impacts, including building an image that it is a big supporter of "sustainable agriculture." On the heels of the 2015 finding by the International Agency for Research on Cancer (IARC) that glyphosate is a probable human carcinogen, the company was hit with many lawsuits for glyphosate's role in, particularly, development of non-Hodgkin lymphoma (NHL). In 2017, a judge's unsealing of two rounds of documents—dubbed the "Monsanto Papers"—made headlines because of what they showed. Emails, both internal and between the company and federal regulators, revealed "questionable research practices by the company, inappropriate ties to a top EPA official, and possible 'ghostwriting' of purportedly 'independent' research studies" that it publicly attributed to academics.

Monsanto has also attacked and discredited researchers, journalists, and others who dare to challenge the safety of its products and/or the company's "integrity." In 2019, more document releases (via Freedom of Information Act, or FOIA, requests) revealed Monsanto's "'intelligence fusion center'" that monitored potential threats to the industry and spread retaliatory responses through third-party sources. Its actions

included a campaign against Carey Gillam, author of *Whitewash: The Story of a Weed Killer, Cancer, and the Corruption of Science*, in which she explains the company's efforts "to cover up—through fraud, intimidation, [and] ghostwriting agency documents—the science showing that glyphosate kills humans as well as weeds."

Beyond Pesticides noted, in its review of Ms. Gillam's book, that Monsanto also spearheaded attacks on IARC Chair Aaron Blair, PhD (a celebrated former National Cancer Institute Occupational Studies Branch chief), and pressured EPA to prevent the participation of epidemiologist Peter Infante, PhD (former director of the Office of Standards Review in the Health Standards Program of the Occupational Safety and Health Administration) on a science advisory panel on the potential carcinogenicity of glyphosate. (For more, see the article "Monsanto: Decades of Deceit" by Ms. Gillam in the Summer 2018 issue of *Beyond Pesticides' journal, Pesticides and You.*)

The *Monsanto Papers* extended the evidence for what a previous report, *The Poison Papers*, had demonstrated: behind-the-scenes collusion between agrochemical companies (and other industry sectors) and federal regulators, a problem that escalated wildly during the Trump administration. *The Poison Papers (TPP)* was a trove of documents—obtained largely by author and activist Carol Van Strum (author of the classic *A Bitter Fog* on the harm caused by Agent Orange—2,4,5-T and 2,4-D—spraying in forestry management in the Northwest), and published by The Bioscience Resource Project and the Center for Media and Democracy. The documents made public a decades-long pattern of collusion between industry and regulators. *TPP* showed, in excruciating detail across more than 20,000 documents, that both entities were aware of the toxicity of many chemical products, and yet worked together to keep this information from the public and the press.

The introduction to *TPP* asserts: "Corporate concealment is not a new story. What is novel in [T]he *Poison Papers* is abundant evidence that EPA and other regulators were, often, knowing participants or even primary instigators of these cover-ups. These regulators failed to inform the public of the hazards of dioxins and other chemicals; of evidence of fraudulent independent testing; even of one instance of widespread human exposure. The papers thus reveal, in the often-incriminating words of the participants themselves, an elaborate universe of deception and deceit surrounding many pesticides and synthetic chemicals."

ATRAZINE

Syngenta's atrazine campaign: damage scientists and EPA decisionmaking



SYNGENTA CROP PROTECTION (SYNGENTA) IS ANOTHER among this crew of ethically challenged corporations; the company has gone to all kinds of lengths to protect its investment in and profits from its atrazine products. The herbicide is used primarily on corn, wheat, and sugar cane, on turf (especially golf courses and lawns), and on Christmas tree farms. It is very prone to runoff from fields (which can contaminate water supplies in the Midwest and South, primarily), and can drift through the air for hundreds of miles from target sites when applied as a spray. The compound is implicated in a variety of health problems, including cancer, endocrine disruption, neurotoxicity, and reproductive anomalies, and is especially dangerous for embryos and young children.

The Center for Media and Democracy's (CMD) *PR Watch* reported in 2012 on documents it had obtained showing that Syngenta's "PR team investigated the press and spent millions to spin news coverage and public perceptions in the face of growing concerns about potential health risks from the widely used weed killer atrazine." The company used a variety of tactics to buoy the perception and reputation of its atrazine products: it sought third parties to speak in support of the herbicide, floated glowing corporate op-ed pieces to appear under willing individuals' bylines, and directed its chief scientist to ghostwrite a book chapter that would challenge the idea of regulating atrazine by applying the Precautionary Principle. After a *New York Times* investigation and report on atrazine, that public relations team at Syngenta held a meeting in which one agenda item was "'to obtain the services of a well know (sic) investigative reporter to probe around the EPA' and, at a minimum get advice 'on what buttons to push and cages to rattle.'"

In 2013, an investigative report, "Pest Control: Syngenta's Secret Campaign to Discredit Atrazine's Critics," by *100Reporters*, a nonprofit investigative journalism group, showed that the agrochemical company "routinely paid 'third-party allies' to appear to be independent supporters, keeping a list of 130 people and groups it could recruit as experts without disclosing ties to the company." The investigating reporters used unsealed court documents in a 2004 court case originally filed by the Holiday Sanitary District in Illinois for atrazine contamination of its water system that led to class action litigation by community water systems (CWS). The court documents "reveal a corporate strategy to discredit critics and

to strip plaintiffs from [a] class-action case." Ultimately, in 2012, Syngenta agreed to pay \$105 million, which was intended to provide financial recoveries for costs that had been borne for decades by more than 1,887 CWSs that provide drinking water for more than one in six U.S. residents across at least 45 states.

The company took special aim at Tyrone Hayes, PhD, professor of integrative biology, University of California, Berkeley, a leading researcher on atrazine, and one of its most outspoken critics. Dr. Hayes began his atrazine research in 1997 with a study funded by Novartis Agribusiness, one of two corporations that would later form Syngenta. When he got results Novartis did not expect or want, he received backlash from the industry. Attempts were made to stall his research, and funding was withheld. It was a critical time, as EPA was close to making a final ruling on atrazine. Hermaphroditic frogs would not help the chemical company's cause. Dr. Hayes continued the research with his own funds and found more of the same results, when Syngenta offered him \$2 million to continue his research "in a private setting." A committed teacher with a lab comprised of loyal students, Dr. Hayes declined the offer and proceeded with research that he knew had to remain in the public domain. With other funding secured, he replicated his work and released the results: exposure to doses of atrazine as small as 0.1 parts per billion (below allowed regulatory limits), turns tadpoles into hermaphrodites—creatures with both male and female sexual characteristics. When his work appeared in the prestigious *Proceedings of the National Academy of Sciences*, Syngenta attacked the study, starting an epic campaign against a respected scientist.

The CWS court documents show that the company conducted research into the vulnerabilities of a judge and Dr. Hayes' personal life. Syngenta's former head of communications, Sherry Duvall Ford, ranked strategies that Syngenta could use against Dr. Hayes in order of risk, according to her notes from Syngenta meetings in April 2005. One possibility: offering "to cut him in on unlimited research funds." Another: Investigate his wife. The company even commissioned a psychological profile of Dr. Hayes. In her notes taken during a 2005 meeting, Ms. Ford refers to Hayes as "paranoid schizo and narcissistic." Syngenta commissioned a psychological profile of the scientist in hopes of boosting its



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campaign to delegitimize him and his work and derail regulatory action at EPA. Beyond Pesticides stepped up to support Dr. Hayes's work by establishing its Fund for Independent Science.

Numerous studies confirm Dr. Hayes' early findings that even minute doses of endocrine disrupting chemicals, including atrazine, can have significant effects on human health, and that the dose-response protocol used by EPA is inadequate to evaluate the effects of endocrine disruptors, which defy classical toxicology and maximum-tolerated animal testing. This corporate corruption and EPA complicity continue to this day. Several of the report's authors have been criticized by industry representatives, other scientists, and even politicians because they have become outspoken advocates for testing, regulating, and replacing endocrine disrupting compounds. Meanwhile, EPA has never fully implemented the requirements of the *Food Quality Protection Act of 1996*, which requires the agency to develop a new protocol to regulate endocrine disruptors like atrazine. The scientists, however, say they feel compelled to continue to speak out because regulatory agencies are slow to act and they are concerned about the health of people, especially infants and children, and wildlife. As Dr. Hayes said to audiences at Beyond Pesticides national conferences: "I went to Harvard on scholarships. I owe you! I did not go to school to let someone pay me off to say things that are not true."

CONCLUSION

What does one make of this litany of reports on corporate and regulatory misbehavior? The *Poison Papers*, the *Monsanto Papers*, the Midwest Center's new reporting, the *100Reporters* report, (CMD's) *PR Watch* investigation—taken together, the pattern and motive are inescapable. Agrochemical companies (and their allies, which have included regulators in federal agencies, particularly EPA and the U.S. Department of Agriculture) have been engaged, and continue to be, in devious and dangerous efforts to hide the truth about the hazards of pesticide (and other chemical) products from the public and the press. These reports from many different reporters yield

ample evidence of this pattern, are the tip of the iceberg, and concerning, cover only some of the orchestrated corporate strategies and behaviors.

The on-the-ground reality is that these actions result in widespread pesticide contamination of human bodies, those of other organisms, and vulnerable ecosystems. Such companies place greater value on their ability to sell poisons than on the harms those products do. This not only is disgraceful, but also, such actions should be the target of federal and state efforts to expose them, hold them accountable, ban their products and participation in the regulatory process, and create and enforce genuinely protective government agencies.

The onus for holding corporations accountable for their malfeasance should not rest on members of the public, and on health and environment education and advocacy groups (such as Beyond Pesticides—which, for example, recently joined a lawsuit against EPA over its decision to reapprove atrazine). Necessary change will not and has not come with campaigns and lawsuits against individual chemicals. Rather, the representative industry and resulting agency corruption must be purged in order to address a systemic problem. The transformation requires a focus on eliminating toxics in favor of ecosystem-compatible practices and products that are now available, but undermined by weak statutes, regulations, and ongoing corruption. When alternatives assessments on pesticide use proposals are fairly and accurately done, toxic pesticide use is found to be unnecessary, given the availability of alternatives. In this light, the following are overwhelmingly unacceptable and unreasonable: public and worker health effects; impacts on children, older people, and other vulnerable population groups; disproportionate risk to black, indigenous and people of color communities; pollinator, ecosystem and biodiversity decline; water and wildlife poisoning; agricultural and fenceline (near chemical production plants) community poisoning; and dependency on petroleum-based pesticides and synthetic fertilizers that drive the climate crisis.

Integrity at EPA must also be restored, with real, rather than "purchased" or biased science at the center, and with zealous protection of health and environment at the forefront.

Stop Corporate Corruption that Supports EPA Pesticide Decisions

Time to institute systemic change at EPA

With a new administration, it is time to end the rule of corporate deception at EPA. We can no longer rely on bad science and unscrupulous chemical manufacturers that put profits above concerns for the health of people and the environment. EPA must audit pesticide registrants for integrity to scientific process and set a moratorium on future pesticide registration until the agency can assure the public that its science is not corrupt, as it has been in the past.

Tell President Biden and Congress to clean up the corruption of science at EPA and set a moratorium on future pesticide registrations—until the agency can assure the public that the chemical manufacturers' science supporting pesticide registrations is not corrupt.

Suggested language:

Dear President Biden/Senator/Representative:

As you address the legacy of bad government left you by the Trump administration, I ask you to look at the need to clean house at EPA. Treatment of chemical companies as clients rather than regulated entities is not new at EPA, but corruption reached new highs during the Trump administration. It is time to end the rule of corporate deception at EPA. Please launch an investigation into the conduct of EPA's Office of Pesticide Programs. We can no longer rely on bad science and unscrupulous chemical manufacturers that put profits above concerns for the health of people and the environment. EPA must audit pesticide registrants for integrity to scientific process and **set a moratorium on future pesticide registrations until the agency can assure the public that the chemical manufacturers' science supporting pesticide registrations is not corrupt**, as it has been in the past.

Taken together, several investigative reports—the *Poison Papers*, the *Monsanto Papers*, the Midwest Center's reporting, the *100Reporters* report, (CMD's) PR Watch investigation—show an inescapable pattern: Agrochemical companies (and their allies, which sometimes have included regulators in federal agencies, including EPA) have been engaged, and continue to be, in devious and dangerous efforts to hide the truth about the harms of pesticide (and other chemical) products from the public and the press. These few reports from many different reporters yield ample evidence of this pattern, and concerning, likely cover only some of the corporate strategies and behaviors afoot.

On the ground, the reality is that these actions result in widespread pesticide contamination of human bodies, those of other organisms, and vulnerable ecosystems. Such companies place greater value on their ability to sell poisons than on the harms those products cause. Such actions should be the target of federal and state efforts to expose them, hold them accountable, and create and enforce genuinely protective regulations. Instead, we have seen collusion.

The onus for holding corporations accountable for their malfeasance should not rest on harmed individuals, members of the public, and health and environment education and advocacy groups. Integrity at EPA—in short supply during the Trump administration—must be restored, with real, rather than "purchased" or biased science at the center, and with zealous protection of health and environment at the forefront. Please launch an investigation into the conduct of EPA's Office of Pesticide Programs, purge politicized science, eliminate pesticides registered with unscrupulous scientific review, and institute new protocol to stop the allowance of toxic chemicals for which there are safer alternative practices and products.

Thank you for your attention to this serious problem.